

August 31, 2006

**MEMORANDUM**

**TO:** Mr. Steve Murray, P.L.S. - Tippecanoe County Surveyor

**FROM:** David W. Eichelberger, P.E. - CBBEL, Indianapolis

**PROJECT:** **Greater Lafayette Health Services Hospital  
(Mass Earthwork and Grading)  
CBBEL Project No. 02-038 (FD)**

**DEVELOPER/OWNER:** **Greater Lafayette Health Services, Inc.**

**LOCATION:** **40° 24' 05" Latitude  
-86° 48' 13" Longitude**

**RECOMMENDATION:** **Final Approval with Conditions  
(Mass Earthwork and Grading)**

Greater Lafayette Health Services will develop a new Acute Care Hospital on approximately 57 acres of a 103 acre site located on the east side of Creasy Lane, between County Road 100 South (McCarty Lane) and County Road 200 South (Haggerty Lane). This submittal is for the approval for the mass earthwork and grading of approximately 57 acres of the site. The applicant is also requesting conceptual approval of the allowable release rates for the proposed project. Current drainage is to the north to the Treece Meadows Regulated Drain and south to Elliott Ditch Regulated Drain. The remaining 46 acres of the site will be developed in the future. This submittal does not include the construction of the hospital, parking, drives, or utility infrastructure except that related to construction of the western detention basin. The applicant will continue to develop construction documents for the final site plan as earth moving is initiated on the site. A submittal for the entire proposed site plan will be provided in the future.

Based on information available to CBBEL, it appears that Branch 19 of the Berlowitz Regulated Drain exists on the eastern portion of the project site. The eastern portion of the site is not being developed at this time; therefore, there is no proposed outlet or encroachment into Branch 19 of the Berlowitz Ditch Regulated Drain due to the subject development. This project will have a direct outlet to the Treece Meadows Regulated Drain and an indirect outlet to the Elliott Ditch Regulated Drain. There are no proposed regulated drain crossings of, or encroachments into, either the Treece Meadows Regulated Drain or the Elliott Ditch Regulated Drain at this time. The project site is within the Elliot Ditch 305(b) Priority Watershed. The project site is within the Tippecanoe County MS4 Area.

This project was previously reviewed in memorandum dated August 18, 2006. After a review of the most recently provided information, CBBEL recommends final approval of the mass earthwork and grading plan with the following conditions:

### **Variances/Encroachments (Mass Earthwork and Grading)**

There are no variance requests or regulated drain encroachments proposed with this portion of the project.

### **Stormwater Quantity (Mass Earthwork and Grading)**

1. The applicant should provide a completed Application for Stormwater Permit and copy of Proof of Publication.
2. The applicant should provide a copy of the executed encroachment agreement between GLHS and the city of Lafayette that will allow access for the proposed off-site outlet to the Treece Meadows Regulated Drain.
3. The applicant should provide an emergency spillway for the west pond in the interim period in the event that the outlet becomes blocked. Provide sizing calculations and a proposed route plan.

### **Stormwater Quality (Mass Earthwork and Grading)**

The proposed stormwater management plan appears to be in substantial compliance with the Ordinance and Standards.

### **General Conditions (Mass Earthwork and Grading)**

1. The applicant must present the project at the Tippecanoe County Drainage Board meeting for the project to be considered for approval
2. The applicant should obtain approval from the City of Lafayette for all work proposed within the Creasy Lane right-of-way.
3. The applicant must pay any final drainage review fees per Ordinance 2005-04-CM and submit a letter to the County Surveyor's Office stating that these fees will be paid.
4. The applicant must pay the Phase II stormwater program fees.
5. All listed issues must be completely addressed before final plan approval and sign-off will be granted by the County Surveyor's Office.

**The following comment is related to the conceptual stormwater management plan for the overall development. This issue must be completely addressed in a resubmittal received by CBEL no later than September 25, 2006 for the project to be considered for conceptual approval at the October 4, 2006 Tippecanoe County Drainage Board Meeting:**

1. The applicant should include all tributary areas from the south into the analysis of the off-site outlet ditch that will serve as the final outlet to the south. This is necessary to verify that the ditch was constructed as designed and can convey the proposed peak runoff from the subject site and all tributary areas.

Please note that limited data for the underground detention system does not allow verification of the required storage to meet the allowable release rates. Approval of the developed plans will require adherence to the current allowable release rates to the south and the northwest. A thorough review of the final plans and calculations will be performed once final development plans and calculations are submitted. Future development of the remaining site will require adherence to the current allowable release rates. Additional detention measures may be required.

For future submittals related to the full development of the subject site, the applicant should determine the allowable release rates based on the unit discharge rates found in Table 3-1 of the Ordinance for the onsite area only, and provide the necessary calculations to determine the storage volume that would have been required to meet these release rates, based on the currently proposed development. The required volume will be used to determine compensation for the F-Lake Regional Detention Facility. Calculations and a narrative summary of this issue should be included in the drainage report.

No error or omission in the plans, calculations or applications (whether said plans, calculations or applications have been reviewed by the review engineer or not) shall permit or release the applicant and designer from constructing this work in any other manner than that provided for in the County Ordinance.

pc: BSA Life Structures  
Tippecanoe County Highway Department

DWE/sb

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